

Application No. 10/697,558
Reply dated August 1, 2005
Response to Office Action dated March 30, 2005

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-6. (cancelled)

7. (new) A development apparatus in an image forming apparatus, the development apparatus comprising an agitation/transfer means for supplying the developer while agitating the same to a developing roller for developing a latent image formed on a photo conductor, a toner accommodating means having a toner supply opening being provided detachable from a developing apparatus body proper above said agitation/transfer means provided in the developing apparatus body proper, a toner receiving opening being formed in the developing apparatus body proper above the agitation/transfer means for receiving the toner from said toner accommodating means, wherein a guide member is provided surrounding said toner receiving opening of the developing apparatus body proper for guiding toner from the toner accommodating means to the agitation/transfer means and preventing a piling up of toner between the agitation/transfer means and inner wall of development apparatus body proper, and wherein a cross sectional area of toner guide passage of said toner guide member is increased from said toner receiving opening in a direction towards the agitation/transfer means.

8. (new) The development apparatus in an image forming apparatus according to claim 7, wherein said toner guide passage of the guide member is formed in a shape broadening toward the agitation/transfer means.

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9. (new) The development apparatus in an image forming apparatus according to claim 7, wherein said agitation/transfer means is a rotation member having one or plurality of spiral blades (member-with-spiral-blade), and said guide member is located so that a vertical center line of the toner guide passage is offset from a vertical line passing through the center of rotation of the member-with-spiral-blade toward upstream of the rotation direction thereof.

10. (new) The development apparatus in an image forming apparatus according to claim 9, wherein said guide member is located so that the vertical center line of the toner guide passage is offset from a vertical line passing through the center of rotation of the member-with-spiral-blade toward upstream of the rotation direction thereof, and a member-with-spiral-blade side opening end of the toner guide passage of said guide member is formed to run along the periphery of the spiral blade or blades of the agitation/transfer means.

11. (new) The development apparatus in an image forming apparatus according to claim 7, wherein said agitation/transfer means is a rotation member having one or plurality of spiral blades (member-with-spiral-blade), and a scraper is provided to the agitation/transfer means at a position facing a member-with-spiral-blade side opening end of the toner guide passage to scrape off the toner piled at the guide passage of the guide member.

12. (new) The development apparatus in an image forming apparatus according to claim 7, wherein said guide member is located so that a vertical center line of the toner guide passage is offset from a vertical line passing through the center of rotation of the member-with-spiral-blade toward upstream of the rotation direction thereof, and a member-with-spiral-blade side opening end of the toner guide passage of said guide member is formed to run along the periphery of the spiral blade or blades of the agitation/transfer means.

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13. (new) A development apparatus in an image forming apparatus, the development apparatus comprising an agitation/transfer means for supplying the developer while agitating the same to a developing roller for developing a latent image formed on a photo conductor, a toner accommodating means having a toner supply opening being provided detachable from a developing apparatus body proper above said agitation/ transfer means provided in the developing apparatus body proper, a toner receiving opening being formed in the developing apparatus body proper above the agitation/transfer means for receiving the toner from said toner accommodating means, wherein a guide member is provided surrounding the toner supply opening of the toner accommodating means for guiding toner from the toner accommodating means to the agitation/transfer means and preventing a piling up of toner between the agitation/transfer means and inner wall of development apparatus body proper, and wherein a cross sectional area of toner guide passage of said toner guide member is increased from said toner receiving opening in a direction towards the agitation/transfer means.

14. (new) The development apparatus in an image forming apparatus according to claim 13, wherein said toner guide passage of the guide member is formed in a shape broaden toward the agitation/transfer means, and the guide member protrudes through the toner receiving opening in the developing apparatus body proper down below the toner receiving opening when the toner accommodating means is mounted to the developing apparatus body proper.

15. (new) The development apparatus in an image forming apparatus according to claim 13, wherein said agitation/transfer means is a rotation member having one or plurality of spiral blades(member-with-spiral-blade), and said guide member is located so that a vertical center line of the toner guide passage is offset from a vertical line passing through the center of rotation of the member-with-spiral-blade toward upstream of the rotation direction thereof.

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16. (new) The development apparatus in an image forming apparatus according to claim 13, wherein said guide member is located so that a vertical center line of the toner guide passage is offset from a vertical line passing through the center of rotation of the member-with-spiral-blade toward upstream of the rotation direction thereof, and a member-with-spiral-blade side opening end of the toner guide passage of said guide member is formed to run along the periphery of the spiral blade or blades of the agitation/transfer means.

17. (new) The development apparatus in an image forming apparatus according to claim 13, wherein said agitation/transfer means is a rotation member having one or plurality of spiral blades(member-with-spiral-blade), and a scraper is provided to the member-with-spiral-blade at a position facing a member-with-spiral-blade side opening end of the toner guide passage to scrape off the toner piled at the guide passage of the guide member.

18. (new) The development apparatus in an image forming apparatus according to claim 13, wherein said development apparatus body proper is provided with a shutter mechanism, the shutter being opened or closed by utilizing the protruded part of the guide member attached to the toner accommodating means to protrude from the toner receiving opening down below the toner receiving opening in the development apparatus body proper when the toner accommodating means is mounted to the developing apparatus body proper.

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